

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

Claims 1.-11. (canceled).

Claim 12. (currently amended): A method of inhibiting neovascularization which comprises administering to a subject in need of such treatment a neovascularization inhibitor composition comprising the following polypeptide ~~(a) or (b)~~ and a pharmaceutically acceptable carrier:

~~(a)—a polypeptide having the amino acid sequence of SEQ ID NO: 1; or~~

~~(b)—a polypeptide having the amino acid sequence of SEQ ID NO: 2;~~

wherein ~~each of the~~ polypeptides ~~(a) and (b)~~ has at least one hairpin domain and four Kringle domains.

Claim 13. (canceled).

Claim 14. (currently amended): A method for treating a disease associated with abnormal angiopoiesis which comprises administering, to a subject in need of such treatment, a neovascularization inhibitor composition comprising the following polypeptide ~~(a) or (b)~~ and a pharmaceutically acceptable carrier:

~~(a)—a polypeptide having the amino acid sequence of SEQ ID NO: 1; or~~

~~(b)—a polypeptide having the amino acid sequence of SEQ ID NO: 2;~~

wherein ~~each of the~~ polypeptides ~~(a) and (b)~~ has at least one hairpin domain and four Kringle domains.

Claim 15. (canceled).

Claim 16. (withdrawn-previously presented): The method of claim 14, wherein said disease is any disease selected from the group consisting of rheumatoid arthritis, psoriasis, Osler-Webber syndrome, myocardial angiopoiesis, telangiectasia, hemophilic joint, angiogenic diseases of the eye, angiofibroma, benign tumors, wound granulation, enteric adhesion, Crohn's disease, atherosclerosis, scleroderma and overcicatrization.

Claims 17-27. (canceled)

Claim 28. (currently amended): A method for treating a solid cancer and/or cancer metastasis, which comprises administering to a subject in need of such treatment a pharmaceutical composition containing the following polypeptide ~~(a) or (b)~~:

~~(a)—a polypeptide having the amino acid sequence of SEQ ID NO 1; or~~

~~(b)—a polypeptide having the amino acid sequence of SEQ ID NO: 2;~~

wherein ~~each of the~~ polypeptides ~~(a) and (b)~~ has at least one hairpin domain and four Kringle domains.

Claim 29. (previously presented): A method for treating a solid cancer and/or cancer metastasis, which comprises administering to a subject in need of such treatment a

pharmaceutical composition containing the polypeptide having the amino acid sequence of SEQ ID NO: 2.

Claim 30. (previously presented): The method as claimed in Claim 28 or Claim 29, wherein said subject has a lung cancer or mammary cancer.

Claim 31. (currently amended): A method for inhibiting tumor growth or metastasis, which comprises administering to a subject in need of such treatment a pharmaceutical composition containing the following polypeptide ~~(a) or (b)~~:

~~(a) — a polypeptide having the amino acid sequence of SEQ ID NO: 1; or~~

~~(b) — a polypeptide having the amino acid sequence of SEQ ID NO: 2;~~

wherein ~~each of the~~ polypeptides ~~(a) and (b)~~ has at least one hairpin domain and four Kringle domains.

Claim 32. (canceled).

Claim 33. (currently amended): The method for inhibiting tumor growth or metatasis as claimed in Claim 31 ~~or Claim 32~~, wherein the subject has lung cancer or mammary cancer.

Claim 34. (currently amended): A method for treating a disease arising from vascular hyperplasia and/or caused by an excessive or abnormal stimulation of the endothelial

cells, which comprises administering to a subject in need of such treatment a pharmaceutical composition containing the following polypeptide ~~(a) or (b)~~:

~~(a) — a polypeptide having the amino acid sequence of SEQ ID NO: 1; or~~

~~(b) — a polypeptide having the amino acid sequence of SEQ ID NO: 2;~~

wherein ~~each of the~~ polypeptides ~~(a) and (b)~~ has at least one hairpin domain and four Kringle domains.

Claim 35. (canceled).

Claim 36. (currently amended): The method of Claim 34 ~~or Claim 35~~, wherein said disease is a disease selected from the group consisting of rheumatoid arthritis, psoriasis, Osler Webber syndrome, myocardial angiopoiesis, telangiectasia, hemophilic joint, angiogenic diseases of the eyes, angiofibroma, benign tumors, hematopoietic malignancies, wound granulation, enteric adhesion, Crohn's disease, atherosclerosis, scleroderma and over cicatrization.

Claim 37. (withdrawn-currently amended): A method for controlling conception which comprises administering to a subject a pharmaceutical composition comprising the following polypeptide ~~(a) or (b)~~:

~~(a) — a polypeptide having the amino acid sequence of SEQ ID NO: 1; or~~

~~(b) — a polypeptide having the amino acid sequence of SEQ ID NO: 2;~~

wherein ~~each of the~~ polypeptides ~~(a) and (b)~~ has at least one hairpin domain and four Kringle domains.

## **REMARKS**

### **Status of Claims and Amendment**

Claims 1, 2, 4, 6, and 13 are canceled. Claims 3, 5, 7-11, 15, and 17-27 have been canceled. Claims 12, 14, 16, and 28-37 are all the claims pending in the application.

No new matter is added.

### **Request for Continued Examination Under**

Applicants thank the Examiner for acknowledgement of the Request for Continued Examination and entry of Applicants' Amendment filed August 3, 2007.

### **Claim of Priority**

Applicants thank the Examiner for acknowledgement of the claim of priority to Japanese Application No. 1998/134681 filed April 28, 1998, as well as receipt of a certified copy of the priority document.

### **Response to Objection to Claim 13**

Claim 13 is objected to by the Examiner as being the same as claim 12.

Claim 13 has been canceled.

Accordingly, the grounds of objection is rendered moot.

### **Response to Rejections Under 35 USC § 112, First Paragraph for Lack of Written Description and New Matter**

Claims 1-2, 4, 12-14, 28, 30-31, 33-34, and 36 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking a written description and for introducing new matter.

In the first aspect of the rejection, the Office Action states that no reason is set forth for the prior claim amendments and that specification support pertaining thereto is not apparent. In the second aspect of the rejection, the Office Action asserts that claim 2 lacks a written description because SEQ ID NO: 2 does not possess at least one hairpin domain and four Kringle

domains. Lastly, the Office Action rejects claim 4 for reciting that SEQ ID NO: 1 is obtained by enzymatic digestion of human HGF wherein amino acids 162-166 are not present in HGF.

With regard to the first aspect of the rejection, Applicants note that the Amendment of August 3, 2007 was made to better illustrate the commercial embodiments of Applicant's invention. Also, the specification provides support for the claim amendments at least at pages 4-6, page 13, line 20-21, and page 13, line 24 to page 14, line 4 of the substitute specification. For instance, "at least one hairpin domain and four Kringle domains, which characterize the structure of HGF/NK4, are substantially retained after the mutation." (See page 13, line 20-21 of substitute specification). Further, "as specific examples of such mutant peptide,...a polypeptide [HGF/NK4(del5)] resulting from the deletion of 5 amino acids, namely amino acid Nos. 162-166 (amino acid Nos. 131-135 in SEQ ID NO:1), from the HGF/NK4 polypeptide,...is...the polypeptide having the amino acid sequence depicted in SEQ ID NO:2." (See page 13, line 24 to page 14, line 4 of substitute specification).

Regarding the second aspect of the rejection, Applicants note that the Office is incorrect that SEQ ID NO: 2 does not possess at least one hairpin domain and four Kringle domains. The Office Action cites to Applicant's comments of May 3, 2007 to support this position, however, no statement supporting the position that four Kringle domains are absent from SEQ ID NO:2 is set forth in Applicant's comments. The Office Action appears to incorrectly think that the deletion of any number of amino acids from a Kringle domain will destroy the domain. Accordingly, Applicants submit herewith materials pertaining to Kringle domains (i.e., Kringle Structures and Antiangiogenesis, Cao Y., Cao R., and Veitonmaki N., *Current Medicinal Chemistry - Anti-Cancer Agents*, Volume 2, Number 6, November 2002, pp. 667-681(15)), for the Office's reading edification and to provide further clarification.